

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A thin film magnetic head comprising:
a read unit, formed above a substrate, having a lower shield, a read element and an upper shield; and
a write unit having a lower pole piece, an upper pole piece, and a coil placed between said lower pole piece and said upper pole piece,
said read unit and said write unit being separated from each other with a non-magnetic material;
wherein at least one of said lower shield and upper shield has a first layer and a second layer formed from magnetic material; [[and]]
wherein the coefficient of thermal expansion of said first layer is different from the coefficient of thermal expansion of said second layer;
wherein the coefficient of thermal expansion of said first layer is larger than the coefficient of thermal expansion of said second layer; and
wherein said first layer is formed between said second layer and said read element.
2. (previously presented) A thin film magnetic head according to claim 1, wherein said second layer is a crystalline magnetic alloy.
3. (previously presented) A thin film magnetic head according to claim 1, wherein said second layer is a NiFe alloy having a composition comprising 30 to 55 wt% Ni.
4. (canceled)

5. (canceled)

6. (previously presented) A thin film magnetic head according to claim 1, wherein said first layer is formed from a NiFe alloy having a composition mainly comprising 80 wt% Ni, said 80 wt% NiFe alloy layer facing to said read element.

7. (previously presented) A thin film magnetic head according to claim 6, wherein said second layer is a crystalline magnetic alloy.

8. (previously presented) A thin film magnetic head according to claim 6, wherein said second layer is a NiFe alloy having a composition comprising 30 to 55 wt% Ni.

9. (previously presented) A thin film magnetic head according to claim 1, wherein a ratio of a thickness of said second layer to a sum of thicknesses of said lower shield and said upper shield is 30% or more.

10. (previously presented) A thin film magnetic head according to claim 9, wherein said second layer is a crystalline magnetic alloy.

11. (previously presented) A thin film magnetic head according to claim 9, wherein said second layer is a NiFe alloy having a composition comprising 30 to 55 wt% Ni.

12. (withdrawn) A thin film magnetic head comprising:
a read unit, formed above a substrate, having a lower shield, a read element, and an upper shield; and
a write unit having a lower pole piece, an upper pole piece, and a coil placed between said lower pole piece and said upper pole piece,
said read unit and said write unit being separated from each other with a non-magnetic material;

wherein a side shield is provide on each side of said read element, part of said side shield being formed from a magnetic material having a low coefficient of thermal expansion of $11.5 \times 10^{-6}/K$ or less.

13. (currently amended) A disk storage device comprising:
a recording medium;
a drive motor for driving said recording medium;
a magnetic head for reading and writing data from and on said recording medium;
a positioning mechanism for positioning said magnetic head;
a first circuit system for controlling said recording medium, said drive motor, said magnetic head, and said positioning mechanism; and
a second circuit system for supplying a write signal to said magnetic head and processing a read signal from said magnetic head;
wherein said magnetic head comprises:
a read unit, formed above a substrate, having a lower shield, a read element and an upper shield; and
a write unit having a lower pole piece, an upper pole piece, and a coil placed between said lower pole piece and said upper pole piece,
said read unit and said write unit being separated from each other with a non-magnetic material;
wherein at least one of said lower shield and upper shield has a first layer and a second layer formed from magnetic material; [[and]]
wherein the coefficient of thermal expansion of said first layer is different from the coefficient of thermal expansion of said second layer;
wherein the coefficient of thermal expansion of said first layer is larger than the coefficient of thermal expansion of said second layer; and
wherein said first layer is formed between said second layer and said read element.

14. (canceled)

15. (previously presented) A thin film magnetic head according to claim 1, wherein the coefficient of thermal expansion of said second layer is $11.5 \times 10^{-6}/K$ or less.

16. (canceled)

17. (canceled)

18. (currently amended) A thin film magnetic head according to claim [[17]] 1, wherein said first layer and said second layer are magnetically connected.

19. (previously presented) A disk storage device according to claim 13, wherein the coefficient of thermal expansion of said second layer is $11.5 \times 10^{-6}/K$ or less.

20. (canceled)

21. (canceled)

22. (currently amended) A disk storage device according to claim [[21]] 13, wherein said first layer and said second layer are magnetically connected.